Logging Plan Approval and Enforcement at Homesite Creek

Complaint Investigation 980142

April 1999

FPB/IRC/14

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The Investigation

This report concludes the Board's investigation of a complaint about the content of an approved logging plan in the Sunshine Coast Forest District. The complainant also reported environmental damage from forest practices carried out under that plan, and asserted inadequate enforcement by district staff.

In 1994, the Ministry of Forests Small Business Forest Enterprise Program (SBFEP) in the Sunshine Coast Forest District started planning to sell the right to harvest timber in a 26.8 hectare cutblock in a rural residential area near Homesite Creek. The site is on a peninsula between the communities of Secret Cove and Halfmoon Bay, approximately 20 km from Sechelt. Timber sale licence A48267 is located immediately adjacent to a rural-residential area, and forest practices there have met with opposition from local residents[1].

On January 22, 1998, the Sierra Legal Defence Fund filed a complaint with the Board as agent for the complainant. The complaint stated:

1. The approved silviculture prescription and logging plan were inadequate because streams and wetlands were not identified and properly classified, and because wildlife trees, while marked on site, were not shown in those plans.

2. The licensee contravened the *Forest Practices Code of British Columbia Act* (the Act) during operations by:

   - failing to build drainage systems that were adequate to accommodate surface and subsurface drainage runoff,
   - depositing sediment and logging debris into streams and watercourses,
   - felling trees into reserve zones and across streams, contrary to approved operational plans, and
   - failing to properly mark riparian zones on site as specified in operational plans.

3. District staff did not appropriately enforce the Act because they:

   - failed to adequately monitor field operations, and
   - refused to issue a stop work order to preserve evidence of Act contraventions or to prevent further environmental damage.

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1 This is one of three complaint investigations involving the sale. For details on the other two complaints, please refer to the Board's investigation reports FPB/IRC/05, *Approval of Silviculture Prescription for Timber Sale A48267 near Homesite Creek, Halfmoon Bay* and FPB/IRC/15, *Fire Tool Requirements and Enforcement at Homesite Creek.*

Most of the issues related to the adequacy of the silviculture prescription were not investigated because the adequacy of the silviculture prescription had been assessed in a previous complaint (FPB/IRC/05). The Board investigated the following complaint issues:

- wetland classification in a silviculture prescription,
- compliance of logging plans with the Code,
- compliance of forest practices with operational plans and the Code,
- operations causing damage to the environment, and
- appropriateness of government monitoring and enforcement.

Investigation Findings

Wetland classification in the silviculture prescription

The first issue concerned wetland classification in the silviculture prescription. The complainant disputed the classification of one wetland, asserting that it should have received a W2 classification, rather than W4. In the complaint area, W2 wetlands are from one to five hectares and W4s are from 0.5 to one hectare. The wetland was classified as W4 in the silviculture prescription and logging plan, so it would have to be under one hectare to be correctly classified. The complainant concluded that the wetland should have been classified as W2 because it appeared to be 1.5 hectares on the 1:5,000 scale map in the silviculture prescription.

Measurement data for the wetland, which had been compiled for the silviculture prescription by foresters under contract to the Ministry of Forests, produced an area measurement of 0.67 hectare. Board investigators carried out a second survey on March 24, 1998 and confirmed that the area was less than one hectare. Therefore, the wetland was properly classified as W4. Although the W4 wetland is less than one hectare, it was shown on the silviculture prescription and logging plan maps as larger than one hectare.

The complainant also asserted that an in-block reserve, located upslope and to the east of the disputed wetland, contained wet areas that should have been included in the calculation of the mapped wetland area. That wet area was measured by Board investigators but was separated from the wetland by some 30 metres of moving water. Therefore, the two wet areas were distinct, and the small wet area did not affect the classification of the larger one as W4.

Finding #1

The wetland at the head of Out-of-Site Creek was correctly classified as a W4 wetland. However, it was incorrectly mapped in the silviculture prescription, which indicated a W2 wetland area.

Compliance of logging plans with the Code

The district approved a logging plan ("original plan") on September 5, 1997. At the time of the complaint, the Act (since changed) required that a logging plan be consistent with the approved silviculture prescription, in this case, a prescription approved in April of 1997.

Original Plan Compliance

The approved silviculture prescription identified three permanent streams and two wetlands. The original logging plan text listed only a single intermittent stream and one wetland. That description of riparian features was not consistent with the silviculture prescription, and thus the original logging plan did not comply with the Code.

There was a second discrepancy concerning leave trees. The silviculture prescription referred to retaining several veteran trees "marked in the field with blue ribbon and paint." The silviculture prescription did not give a precise number of such trees, nor show their location on a map. The text of the original logging plan referred to retention of only one old-growth fir (although the map attached to that plan, being a copy of the map from the silviculture prescription, did show the location of a number of leave trees). Therefore, in regard to leave trees, the original logging plan was again not consistent with the silviculture prescription and did not comply with the Code.

The third discrepancy concerned season of operations. The silviculture prescription stated that there were "no seasonal constraints." The original logging plan, in contrast, specified "summer/fall" as the season of operations. This, however, was not an inconsistency. The logging plan's seasonal constraint was more restrictive than the silviculture prescription but did not contradict it.

Finding #2

The original logging plan submitted by the licensee on September 19, 1997 was not consistent with the approved silviculture prescription. The licensee, by submitting an inconsistent logging plan for approval, did not comply with the Code.

Even though the original logging plan did not comply with the Code, a designate of the district manager approved it on September 5, 1997.[2] A logging plan can only be approved if the district manager finds that it complies with the Code.

Finding #3

The district manager's designate approved a logging plan that did not comply with the Code. That approval did not comply with the Code.

Replacement Plan Compliance

The original logging plan required an amendment to make the text consistent with the approved silviculture prescription. Instead of amending the original logging plan, the approved plan was replaced by another logging plan ("replacement plan") on January 20, 1998. The replacement plan was consistent with the approved silviculture prescription. It showed the wetlands and streams and referred to the leave trees. It also had no seasonal constraint on operations. The replacement logging plan for the timber sale had minor deficiencies in content, but generally complied with the Act. For example, the location of culverts was not shown in the logging plan, but was shown on a road permit.

Finding #4

The replacement logging plan for the timber sale was consistent with the approved silviculture prescription, included the required information, and generally complied with the Code.

Compliance of forest practices with operational plans and the Code

Operations under the original logging plan began on January 12, 1998. On January 16th (the third day of operations), the complainant met with district compliance and enforcement staff and pointed out that the approved logging plan restricted operations to the summer and fall only. Operations from January 12th until January 16th did not comply with that restriction. On January 20th, the replacement logging plan, without seasonal restrictions, was approved.

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[2] Note that this approval date was two weeks before the indicated plan submission date. That apparent anomaly occurred as follows: Revisions were discussed with the licensee at the district office in late August and some changes were made. The district printed a final copy that was approved by the district and left for pickup, and signing, by the licensee. Thus, the "submission" date of September 19, 1998 reflects the date the licensee came by to sign the finalized copy, not the actual date of submission of the plan.

Finding #5

The licensee carried out operations for five days in January, despite restrictions in the original logging plan to summer and fall seasons only. The licensee failed to comply with the Code on those days.

The complainant also asserted that the boundaries of the block were not clearly marked, especially in the northwestern corner. The requirement to mark block boundaries was, at the time, imposed by the *Timber Harvesting Practices Regulation* (since amended). The Board investigators briefly checked block boundaries on March 24th. Someone had painted over blazes that had been used to mark boundaries and also removed all flagging between such blazes. Thus, it was extremely difficult to determine whether block boundaries had been adequately marked. The evidence had been obscured before the field investigation began.

Finding #6

The Board was unable to investigate flagging of block boundaries because flagging had been removed and blazes obscured before field investigation could occur.

Heavy rain began on January 16th and continued through January 23rd. The *Forest Road Regulation* requires that a person modifying the subgrade of a road build drainage systems concurrently with subgrade construction that can accommodate surface runoff. By January 23rd, the road surface was saturated with water, with sediment-laden water pooling on the road, running down a newly-constructed roadside ditch, and flooding across the road toward a nearby creek. The licensee failed to build drainage systems that could accommodate the surface runoff.

Finding #7

The licensee did not build drainage systems that could accommodate surface drainage runoff during the construction period, and so failed to comply with the Code.

The complainant asserted that nine veteran trees had been marked in the field but not designated on the original logging plan. In fact, the trees were all marked on both logging plan maps.

In summary, the Board found that the licensee's forest practices did not comply with a seasonal restriction imposed by the original logging plan, or with a requirement of the *Forest Road Regulation* to accommodate surface drainage runoff during road construction.

Operations causing damage to the environment

The complainant was concerned about actual damage to the environment due to sedimentation from the road into a creek and potential damage due to inadequately-marked reserve boundaries and unmarked leave trees.

A detailed chronology of the licensee's operations and district monitoring and enforcement is included in the Appendix. The licensee felled trees along road rights-of-ways for six days between January 12th and January 23rd. The licensee also did some road upgrading (primarily ditching) for three days in that period. Heavy rain began on January 16th and continued through to January 23rd. The complainant reported that silt-laden water was flowing across the road toward an unnamed creek and that vehicle traffic had heavily rutted the road. Trees had been felled into a riparian reserve and logging debris had been deposited into wet sites and small streams.

The silt-laden water that was flowing across the rutted road did not actually reach the nearby stream. The licensee had installed three silt barriers that effectively captured the silt.

> **Finding #8**
>
> The licensee's failure to control surface drainage runoff did not result in sediment transport to a watercourse. There was a risk of damage to the environment, but no evidence of actual damage as a result of the non-compliance.

The complainant asserted that trees and other debris had been deposited into a stream and a reserve. The stumps of several of the trees that had fallen into a reserve had undercuts aligned to direct the trees to fall along the right-of-way, indicating an intent by the licensee to avoid falling into the reserve. Most of those trees were alders that tend to grow asymmetrically so that they cannot be felled in any direction other than that of the lean. The Board concluded that growth form of alders, not falling techniques, caused some trees to fall into a reserve. The licensee also allowed some debris (limbs, bark, needles) to drop into wet areas, but the Board considered that to be insignificant non-compliance because the amount of slash and debris material was very minor.

> **Finding #9**
>
> Some logging debris and several trees had fallen into reserves, but the deposition was not deliberate and the amount of material posed no significant risk of damage to the environment.

In addition to the assertions of actual environmental damage, the complainant was concerned about potential damage resulting from inadequate marking of block features such as riparian reserves and leave trees. Leave trees were found to be adequately marked

in the field. Someone had removed all flagging before the Board investigator went to the site on March 24th, so the marking of reserves could not be investigated.

Appropriateness of government monitoring, detection and enforcement

The complainant asserted two concerns with the Ministry of Forest's enforcement of the Act:

- a general failure to enforce the Act, and
- a specific failure to issue a stop-work order to prevent environmental damage or to preserve evidence for the Board investigation.

Before falling and road upgrading began, there were two pre-operational meetings held between district staff and the licensee to ensure that the licensee was clear about boundaries, reserves and other aspects of the logging plan. One of those meetings was in the office and one in the field. At neither meeting did anyone notice the restriction of operations to the summer and fall seasons only.

As noted previously, operations occurred for parts of six days. There were thirteen inspections by district staff: one before operations began, six during operations and six after operations ceased. Most of the observations that were noted by the complainant and brought to the ministry's attention were documented in inspection reports (e.g., erosion/drainage problems on the access road, the need for silt fences, falling into the in-block reserve and in the riparian management area beside the wetland, debris in a small watercourse). However, none of the inspections identified that operations contravened the seasonal restriction in the logging plan that was in effect prior to January 20, 1998.

The inspection reports also made no mention of the licensee's non-compliance with the requirement to accommodate drainage runoff during the construction period.

> **Finding #10**
>
> The frequency of district compliance monitoring was more than normal and appropriate. However, the monitoring was not fully effective because it did not identify two failures to comply with the Code: carrying out operations contrary to a seasonal restriction, and failure to accommodate drainage runoff.

District enforcement officials had a range of enforcement tools available to them to correct problems noted during inspections, from verbal and written warnings through violation tickets, administrative remedies, stop work orders and formal prosecutions. The officials noted eight problems, issued written warnings and corrective instructions for each, and awaited corrective action by the licensee. Three corrective actions were carried out immediately, another three were carried out when the site had dried and two have not

yet been completed due to lack of machine access. The Board finds that the district's enforcement actions were appropriate and that no stop work order was required in the circumstances.

Finding #11

District use of corrective instructions as the preferred enforcement tool was generally appropriate.

Conclusions

The Board reached the following conclusions regarding the issues investigated in this complaint:

Wetland classification in the silviculture prescription

The disputed wetland was correctly classified, but was inaccurately mapped in the silviculture prescription.

Compliance of the logging plans with the Code

The licensee and district staff did not comply with the Act by respectively submitting and approving a logging plan that was inconsistent (omission of a wetland and several streams, no reference to leave trees) with the approved silviculture prescription.

The district manager's approval of the replacement logging plan did comply with the Code. The replacement plan showed streams and wetlands and described leave trees. It removed a seasonal restriction on harvesting but was consistent with the approved silviculture prescription.

Removal of the restriction on winter operations in the replacement logging plan did not relieve the licensee of the responsibility to adjust operations according to site and weather conditions to avoid damage to the environment.

Compliance of forest practices with the operational plans and the Code

It was impossible to determine whether block and reserve boundaries had been adequately marked because flagging had been removed and blazes obscured before field investigation occurred.

The licensee did not comply with the Code when it carried out operations for several days in January before the original approved logging plan was replaced and the seasonal restriction removed.

Leave trees were adequately marked in the field and correctly described in the replacement logging plan.

The licensee did not comply with Code requirements to install culverts to accommodate drainage during the construction period.

Operations causing damage to the environment

Problems with surface runoff and drainage control occurred and the complainant's concerns about those problems were well-founded. Nevertheless, the problems were adequately dealt with, so there was no resultant damage to the environment.

There was no damage to the environment caused by some trees that were felled into a reserve. The falling into the reserve was not deliberate and was consistent with normal harvesting practices.

Appropriateness of government monitoring and enforcement

The frequency of the district's monitoring of compliance was more frequent than normal practice and was appropriate, considering the controversial nature of the site.

Two non-compliance matters (non-compliance with the seasonal restrictions in the original logging plan and with the *Forest Road Regulation* regarding control of drainage runoff during road construction) were not detected. However, removing the seasonal restriction and ordering a cessation of further road construction work were appropriate alternatives to a stop work order in the circumstances. Issuance of instructions to ensure the licensee performed rehabilitative work was also appropriate in the circumstances.

Overall Conclusions

Overall, the Board concludes that most of the district's planning and enforcement and most of the licensee's practices on the timber sale area at Homesite Creek met Code requirements. There was some non-compliance both in the planning and the practices in the field, but there was no damage to the environment as a result. The inspections by the district were frequent and identified most of the problems that arose. The district instructed the licensee to take adequate corrective action, and action was either completed by the licensee or is planned before operations resume. The licensee did delay resumption of operations when instructed by district staff. Several of the complainant's assertions were not substantiated, and one could not be fully investigated.

In the Board's view, both the district and the licensee should have used more care and attention in planning and carrying out operations during very wet weather in a rural residential area that was already the subject of public controversy. There was a risk of damage to the environment as a result of this situation. The fact that no damage resulted from the approval of an inconsistent logging plan and some poor road construction practices was partly a result of remedial measures ordered by the district staff and partly a result of circumstances.

The Board also concludes that the district should have identified the two situations of non-compliance with the Code in its enforcement inspections. By January 22nd, once the risk of damage became evident, district staff should have given more consideration to

issuing a stop work order. The absence of a seasonal constraint in an approved plan does not mean that the licensee could proceed without due regard for site and weather conditions. The Code requires that operations stop if there may be damage to the environment for any reason. Resuming operations at this site on January 22nd despite the very wet conditions diminished public confidence in the practices of the Small Business Forest Enterprise Program in the area. Failure to identify two non-compliance matters also diminished public confidence in government enforcement in the area.

The violence, vandalism and disruption of approved operations was inappropriate and did not contribute to resolving the situation at Homesite Creek.

Recommendations

The Board makes the following recommendations to the Ministry of Forests:

1. With regard to Sunshine Coast Forest District practices:

   a) Regardless of operational pressures, district staff must devote sufficient time to carefully review all operational plans for required content and for consistency with other plans. Given the reduced content requirements of operational plans due to changes to the Code, district staff must be especially attentive when they have an approval function. That attentiveness is even more critical when operations occur in areas that have become controversial.

   b) District staff must be diligent during field inspections to identify non-compliance with the Code.

2. The Ministry of Forests needs to be proactive in its communications with the public when forest operations are planned in rural residential areas. The circumstances that led to this complaint reinforce the significance of a recommendation that the Board made in an earlier complaint about the same timber sale (See FPB/IRC/05, Final Report - Complaint 970096, February 1998):

   > "The Board believes that, when operational planning is scheduled for any rural residential area, forest district managers need to take proactive measures to inform local governments and interest groups of forthcoming plans likely to affect them, ensure a clear public understanding of … planning processes and the decisions that result from them, and encourage community participation in operational planning."

3. The Ministry of Forests needs to ensure there is effective communication between the ministry, the licensee and the public after operational plans are approved and before operations commence in rural residential areas. In this case, good communication between the parties about the terms and conditions of the logging plan might have avoided operation during a restricted period and the controversy that ensued. It is especially important to maintain effective communication when public concerns have been expressed about operations.

APPENDIX

Chronology of Operations

DATE	LICENSEE'S OPERATIONS	DISTRICT ACTIONS	RESPONSE
Jan 9	Site orientation with Ministry of Forests	Site orientation with Licensee	
Jan 12	Fall trees on spur road		
Jan 13	No operations	Inspection	
Jan 14	Fall trees on spur road		
Jan 15	Fall trees on spur road		
Jan 16	Road upgrading	Inspection. Instruct to place hay bale to trap silt.	Hay bale installed
Jan 17	Road upgrading	Inspection. Buck trees felled into reserve. Clean debris from watercourses. Install culvert as soon as possible.	Trees not bucked, debris not removed. Culvert placed on site, not installed.
Jan 18	No operations		
Jan 19	No operations	Inspection. Cap road to stop erosion. No vehicle use until road capped.	Road use not stopped. Road capped in August.
Jan 20	No operations		
Jan 21	No operations		
Jan 22	Road upgrading	Inspection. Add silt fences below hay bale.	Two silt fences installed.
Jan 23**	Road upgrading (protests)	Inspection. Stop further road use.	Road use stopped.
Jan 26	No operations	Inspection	
Jan 28	No operations	Inspection	
Feb 4	No operations	Inspection	
Mar 23	No operations	Inspection	
Mar 25**	No operations	Inspection	
Apr 2	No operations	Inspection	
August	Road capped, culvert installed		

** Board investigator on site